PATENT JW

Pocket No. 010337

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:) For:	SYSTEM AND METHOD FOR MAINTAINING A
Chesavage et al.))	DISTRIBUTED OBJECT SYSTEM
Serial No.: 09/864,417)	
Filed: May 23, 2001) Grou	p Art Unit: 2683

TRANSMITTAL LETTER

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing please find Appellant's Appeal Brief in Support of Appellant's Appeal to the Board of Patent Appeals and Interferences. Please charge our Deposit Account No. 17 - 0026 of QUALCOMM Incorporated in the amount of \$500.00 for the filing of the Appeal Brief. In addition, please charge any fees whatsoever which may become properly due or payable, as set forth in 37 CFR 1.16 to 37 CFR 1.18 inclusive, for the entire pendency of this application without specific additional authorization.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on:

January 18, 2005

(Date of Deposit)

Theresa M. Badet

(Name of the Person Making Deposit)

(Signature)

January 18, 2005

(Date of Signature)

Respectfully submitted,

Dated: January 18, 2005

By: / W/ / Thomas M. Thibault

Reg. No. 42,181

QUALCOMM Incorporated (PTO Customer No. 23696)

Attn: Patent Department 5775 Morehouse Drive

San Diego, California 92121-1714

Telephone:

(858) 651-2356

Facsimile:

(858) 658-2502

/	OIP	E
	JAN 24	(CE
(Fig.	TRADE	MARK CHE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of: Chesavage et al.)) For: SYSTEM AND METHOD FOR) MAINTAINING A DISTRIBUTED) OBJECT SYSTEM
Serial No. 09/864,417	į
Filed: May 23, 2001) Group Art Unit: 2683

APPELLANT'S BRIEF (37 CFR 1.192)

Mail Stop Appeal Brief Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

ATTENTION: Board of Patent Appeals and Interferences

This following appeal brief is hereby submitted following Appellant's Notice of Appeal, filed on November 15, 2004.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450; on:

January 18, 2005
(Date of Deposit)
Theresa Badet
(Name of Person Signing)

(Signature)

January 18, 2005
(Date of Signature)

01/26/2005 CNGUYEN 00000007 170026 09864417 01 FC:1402 500.00 DA

REAL PARTY IN INTEREST

The real party in interest is Qualcomm Incorporated, located at 5775 Morehouse Drive, San Diego, California 92121.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences that will directly affect, be directly affected by, or have a bearing on the Board's decision in this appeal.

STATUS OF THE CLAIMS

- 1. The total number of claims pending in the application is 24.
- 2. Claims 1-20, 26-28, and 31 stand rejected.
- 3. Claims 1-20, 26-28, and 31 are on appeal.

STATUS OF AMENDMENT

There have been no amendments filed in the present case after issuance of the Examiner's final action of July15, 2004.

SUMMARY OF CLAIMED SUBJECT MATTER

Claims 1, 14, 18, 20, and 31 are independent claims. There are no means plus function claims. A concise explanation of the subject matter of the independent claims is provided below:

Claim 1: This claim is directed to a system for maintaining data objects distributed on a network, comprising a network controller (20) that transmits a "data object update message" and a corresponding data object update version sequence number (OVSN)" (page 9, lines 37 through page 10, lines 1-13) after receipt of an update request message from a wireless communication device (page 9, lines 15-17). The system also comprises a receiver (i.e. wireless communication device) (32) that includes a memory (52) for storing a data object based on the data object update message and corresponding OVSN (page 4, line 38 to page 5, lines 1-2), and a processor (50) for

providing a "last received" OVSN in the update request message (page 9, lines 15-19; page 8, lines 2-3).

Claim 14: This claim is directed to a receiver (i.e. wireless communication device) (32) comprising a transceiver (60), a memory (52) for storing a data object based on a data object update message and corresponding OVSN (page 4, line 38 to page 5, lines 1-2) and a processor (50) for providing a "last received" OVSN in the update request message (page 9, lines 15-19; page 8, lines 2-3).

Claim 18: This claim is directed to a method of maintaining a distributed object system from the receiver's perspective, comprising receiving a data object update message with a corresponding data object update version sequence number (OVSN) (page 8, lines 30-34), storing data objects based on the data object update message and OVSN (page 8, line 32-36), and transmitting a last received OVSN in any data update request message sent to a network controller (page 9, lines 15-19; page 8, lines 2-3).

Claim 20: This claim is directed to a method of maintaining a distributed object system from a network controller's perspective, comprising receiving a message from a wireless communication device, the message comprising an OVSN (page 9, lines 15-17), comparing the received OVSN to a local OVSN (page 9, lines 35-37), and transmitting data to the wireless communication device is the received OVSN is not equal to the local OVSN (page 9, lines 37 through page 10, lines 1-13).

Claim 31: This claim is directed to a network controller for maintaining a distributed object system, comprising a database (28) for storing an OVSN (page 8, lines 20-23), a transceiver (72) for transmitting data objects and corresponding OVSN's and for receiving OVSN's from a wireless communication device (page 8 lines 30-32 and page 9, lines 15-17), and a processor (22) for comparing received OVSN's to OVSN's stored in the database (page 9, lines 35-37), and for sending updated information to requesting wireless communication devices if a received OVSN does not match the OVSN stored in the database (page 9, lines 37 through page 10, lines 1-13).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- 1. Claims 20, 26-27, and 31 stand rejected under 35 U.S.C. 102(e) as being anticipated by Sakakura (US patent number 6,389,423 B1).
- 2. Claim 28 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakura in view of LaDue (US patent number 6,285,868 B1).
- 3. Claims 1-4, 6-7, 9-10, 14-15, and 18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakura and Yamagishi (EP 0876029 A2).
- 4. Claims 5, 8, 11-13, 16-17, and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakura in view of Yamagishi and LaDue.

ARGUMENTS

Rejections under 35 U.S.C. 102(e)

Claims 20, 26-27, and 31 stand rejected under 35 U.S.C. 102(e) as being anticipated by Sakakura (US 6,389,423). It was alleged that Sakakura teaches the element of transmitting a last received OVSN by a mobile communication device in column 8, lines 43-46 & lines 51-60 and in column 9, lines 1-14 & 23-27. Appellants do not agree.

Appellants believe that Sakakura teaches a system whereby devices are updated with current data using a "log" or "version" number. As new information is available at a central station, it is transmitted to other devices along with the version number. When the data is received, a device compares the version number to a version number stored within the device, and if the received version number is greater than the stored version number, the device is updated with new data, and the new version number is stored. This type of update scheme can be thought of as a "push" model; i.e., when an update is available at a central communication center, for example, it is transmitted to remote devices, along with a version number, in order for the remote devices to decide whether to update their data or not.

The Examiner believes that all of Appellants' claim elements are taught in column 8, lines 43-46 & lines 51-60 and in column 9, lines 1-14 & 23-27 of Sakakura. Column 8, lines 43-46 and lines 51-60 describe a data updating process involving a mobile terminal and a server. The mobile terminal requests a "data synchronization request" to the server to update its data. However, there is no teaching that the mobile terminal transmits a current version number to the server. In column 9, lines 1-14 & 23-27, Sakakura provides further details of what happens at the server

after a data synchronization request has been made. The server "inquires" to "data store 302" for a difference between the data which is going to be updated...and the data obtained at the time of the last data synchronization made..." In other words, the server compares the actual information, not a version number, to determine what information to send to the mobile terminal.

Appellants' claimed invention makes use of a "last received" OVSN in a message to a network controller, by a wireless communication device, to update its data. The OVSN information is used by the network controller to determine whether or not to provide updated information to the wireless communication device and, if so, provide the updated information to the wireless communication device. Sakakura does not teach a network controller for receiving OVSN information from a mobile device, and therefore cannot anticipate Appellants' claimed invention. Appellants believe, therefore, that claims 20, 26-27, and 31 should be allowed, because each of these claims contain the feature of receiving OVSN information from a wireless communication device. Appellant further believes that claims 26 and 27, which depend on claim 20, are allowable as being based on claim 20, which Appellants believe is an allowable claim for the reasons just mentioned.

Rejections under 35 U.S.C. 103(a)

- I. Claim 28 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakura in view of LaDue (US patent number 6,285,868 B1). Appellants believe that claim 8, which depends on claims 6, 4, 2, and 1, is allowable as being based on at least claim 1, which Appellants believe is an allowable claim for reasons that will be explained below in an argument directed at claim 1.
- II. Claims 1-4, 6-7, 9-10, 14-15, and 18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakura and Yamagishi (EP 0876029 A2). In the Final Office Action of July 15, 2004, it was alleged that Sakakura teaches all of the elements of independent claims 1, 14, and 18 in the abstract, col. 2, col. 6 lines 56-62, col. 8 lines 37-67, col. 9 lines 1-14 and 23-27, col. 14 lines 52-67, and Fig. 19 of Sakakura (page 4, lines11-20 of Final Office Action). The next few sentences (page 4 lines 20-22 through page 5 lines 1-3) of the Final Office Action read as follows:

"Sakakura does specifically teach an update request message from a wireless communication device. Yamagishi teaches an update request message from a

wireless communication device (see col. 8, lines 47-51). It would have been obvious ... to make the device adapt to include an update request message from a wireless communication device because this would allow for the efficient transmission of distribution data."

In the first sentence quoted above, Appellants believe that there is an error in the rejection language. Appellants believe that the Examiner meant to say that Sakakura does NOT specifically teach an update request message from a wireless communication device. As evidence of the Examiner's intent, Appellants note that the Examiner then continues by alleging that Yamagishi teaches such a request. In addition, the Examiner appears to be combining the teachings of Sakakura with the teaching of an update request message, allegedly found in Yamagishi, to obviate Appellants' claims as evidenced in the above recitation, last sentence.

III. Claims 5, 8, 11-13, 16-17, and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakura in view of Yamagishi and LaDue. It was alleged that it would have been obvious to combine various teachings of Sakakura, Yamagishi, and LaDue to arrive at Appellants' claims. Appellants believe all independent claims from which these claims depend are patentable, as explained above. Therefore, Appellants respectfully request that the rejection to these claims be reversed on the basis that they depend from allowable claims.

CONCLUSION

For the foregoing reasons, Appellants respectfully request that all presently outstanding rejections be reversed, and that all claims under appeal be allowed.

Respectfully submitted,

Attorney for Appellant Registration No. 42,181

QUALCOMM Incorporated 5775 Morehouse Drive San Diego, California 92121-2779 Telephone: (858) 651-2356

Telephone: Facsimile:

(858) 658-1576

APPENDIX OF CLAIMS

1. (Presently Presented) A system for maintaining data objects distributed on a network, comprising:

a network controller coupled to the network and operable to enable data communications including the transmission of a data object update message and a corresponding data object update version sequence number ("OVSN") after receipt of an update request message from a wireless communication device; and

a receiver coupled to the network and operable to enable data communications with the network controller, the receiver including a memory for storing a data object based on the data object update message and the OVSN and a processor coupled to the memory and operable to include a last received OVSN in the update request message.

- 2. (Original) The system of claim 1, wherein the network controller includes a memory for storing the data object based on the data object update message transmitted to the receiver and a corresponding OVSN.
- 3. (Original) The system of claim 1, wherein the network controller includes a memory for storing the data object based on the data object update message transmitted to a plurality of receivers that includes the receiver and a corresponding OVSN.
- 4. (Original) The system of claim 2, wherein the network controller is further operable to increment the OVSN for each data object update message transmitted to the receiver.
- 5. (Original) The system of claim 1, wherein each data object represents an encoded message.
- 6. (Original) The system of claim 4, wherein the receiver is further operable to include the latest received OVSN in a message to the network controller.
- 7. (Original) The system of claim 6, wherein the receiver is a wireless communication device and the network is a wireless network.

- 8. (Original) The system of claim 6, wherein the network controller is further operable to decode the message from the receiver, where the message references a data object and includes the receiver's OVSN.
- 9. (Original) The system of claim 4, wherein the network controller discards messages from the receiver when the receiver's OVSN is less than the last OVSN sent to the receiver.
- 10. (Original) The system of claim 9, wherein each data object represents a macro message and has a data object version number.
- (Original) The system of claim 10, wherein the receiver is further operable to transmit the data object version number to represent the version of the encoded message in a message to the network controller.
- 12. (Original) The system of claim 11, wherein the network controller is further operable to decode the encoded message based on the data object version number received from said receiver.
- 13. (Original) The system of claim 11, wherein the network controller is further operable to send data object update messages and corresponding OVSNs to the receiver based on the OVSN included in a message from the receiver.
- 14. (Previously presented) A receiver for communicating data signals using a network, comprising:
 - a transceiver coupled to the network and operable to receive data communications;
 - a memory coupled to the transceiver for storing data objects and data object message version sequence numbers (OVSN) transmitted from a network controller in a data communication to the receiver; and
 - a processor coupled to the memory and transceiver and operable to include the last received OVSN in a <u>data update request</u> message to the network controller.

- 15. (Original) The mobile communications terminal of claim 14, wherein the processor is further operable to include the largest received OVSN in a message to the network controller.
- 16. (Original) The mobile communications terminal of claim 14, wherein each data object represents an encoded message and has a data object number.
- 17. (Original) The mobile communications terminal of claim 16, wherein the processor is further operable to use the data object number in a message to the network controller to identify a version of the encoded message.
- 18. (Previously Presented) A method of maintaining a distributed object system using a network, comprising the steps of:

receiving a data object update message with a data object update version sequence number (OVSN) from a network controller;

storing data objects based on the data object update message and said OVSN; and transmitting the last received OVSN in a subsequent data update request message to a network controller.

- 19. (Original) The method of claim 18, wherein each of said data objects represent an encoded message and has a data object version number.
- 20. (Previously Presented) A method of maintaining a distributed object system using a network, comprising the steps of:

receiving a message from a wireless communication device, said message comprising an object version sequence number (OVSN), said OVSN representing a first state of a data object relating to said wireless communication device;

comparing said OVSN with a local OVSN, said local OVSN representing a second state of said data object; and

transmitting updated data to the wireless communication device if said OVSN is not equal to said local OVSN.

Claims 21-25 (Canceled)

- 26. (Previously Presented) The method of claim 20, wherein the updated data comprises all data objects.
- 27. (Original) The method of claim 20, wherein the step of comparing said OVSN with said local OVSN is performed at a network controller.
- 28. (Original) The method of claim 20, wherein the step of comparing said OVSN with said local OVSN is performed at a dispatch station.

Claim 29 and 30 (Canceled)

- 31. (Previously Presented) A network controller for maintaining a distributed object system using a network, said network controller comprising:
 - a database for storing a data object and a corresponding data object version sequence number (OVSN);
 - a transceiver for sending a data object update message and a corresponding OVSN, said OVSN representing a state of said data object and for receiving a message from a wireless communication device, said message comprising an OVSN representing a state of a data object associated with said wireless communication device; and
 - a processor for comparing said received OVSN with said OVSN stored within said database, and further for transmitting updated data to the wireless communication device if said received OVSN is not equal to said OVSN stored in said database.